

Chapter 10

DELTA SECTION

The Delta section is the area south of Green Village Road between the west side of Southern Boulevard and the north side of Fairmount Avenue/Meyersville Road. It includes Melrose Estates, The Farm at Green Village, a market garden, a fire company, residential lots and several parcels owned by Chatham Township. Nash Field is also within the Delta region. Going southwest there are parcels of privately owned open space and the Rolling Knolls landfill, formerly known as the Miele dump. The rest of the area lies within the federally-owned lands of the Great Swamp National Wildlife Refuge.

The most prominent feature of this section is water. The land is in the watersheds of Loantaka Brook and Black Brook and receives runoff from the north and east, eventually discharging it into the Great Swamp. There is extensive use of drainage ditches and pipes to route water away from buildings, cultivated fields, pastures and recreational areas. There are many low wet woods, swamps and marshes. Sandy ridges and knolls, principally along Britten Road and to the east, provide reasonably well-drained places for houses and small gardens.

The area to the west of Loantaka Brook was formerly used by a construction business and for raising horses. In the area east of Loantaka Brook there is a garden store on the site of the former Haarsch Farm. Township residents make use of the recreational facilities at Nash Field where there are ball fields, a skating rink, playground equipment, picnic tables and grills. Trails at the back of Nash Field may be used for nature walks. The site is a natural habitat for aquatic animals, birds and plants. The dominant tree species here and on the rest of the Delta site are beech, oak and red maple.

The most dense development in the area consists of the Melrose age-restricted townhouses on the site of the former Heyl greenhouses on Green Village Road.

The Great Swamp National Wildlife Refuge includes 1400 acres within the boundaries of Chatham Township. Almost all of the portion of the Refuge within the Township is part of the Wilderness Area in which the public is allowed to hike.

At the end of Britten Road is the 130 acre area now known as the Rolling Knolls landfill which was used as a sanitary landfill until it was closed in 1968. The fill has raised the land above its original swamp-level elevation. Records of the Board of Health show that the westerly tributary of Black Brook is blocked by the landfill. It was declared a Superfund site in 2003 and is in the EPA remediation program.

The Rolling Knolls Landfill site is in the Green Village section of Chatham Township, Morris County, New Jersey. The site originally covered approximately 200 acres and operated as an unlined municipal landfill from the early 1930s through December 1968. The site is bordered by the Great Swamp National Wildlife Refuge to the east, south, and southwest. Approximately 30 acres of the landfill overlap the refuge. Loantaka Brook is located to the west of the site, and private properties, including residential housing, are located to the north and northwest. Wastes dumped at the landfill came from private companies and at least seven surrounding municipalities including Summit, South Orange, Maplewood, Chatham, Madison, Harding, and Florham Park (USEPA 2004) and included household refuse, residential septic wastes, pharmaceutical wastes, and construction and demolition debris. Additionally, approximately 600 tons of pharmaceutical wastes generated by the Millmaster Chemical Company, Berkeley Heights, were deposited in the landfill from the 1930s to 1968. These wastes included alcohols, esters, ethers and other pharmaceutical waste products. Millmaster Chemical Company may have also disposed of 2,3,7,8-tetrachlorodibenzo-p-dioxin (a.k.a. dioxin) contaminated wastes at the site (NUS 1985). Pesticides were used on the landfill to control weeds, rodents, and mosquitoes, and oil was applied to unpaved landfill paths to control dust. Semi-liquid swamp muck obtained from the edge of the landfill was used daily to cover wastes.

At least three fires occurred on the site during the 1960s and 1970s, causing dense smoke to drift for days into nearby residential areas. Fire vehicles attempting to respond were trapped in the muck. One fire occurred in 1970 and lasted three days. Another occurred in 1974 and lasted six days.

Between 1979 and 1982, local citizen groups expressed concern over the construction of fire roads and alleged continued dumping at the landfill in violation of the NJDEP variance. The Chatham Township Environmental Commission also expressed concern regarding the potential impact from the fire roads on drainage and movement of landfill leachate. In 1997, the Great Swamp Watershed Association demanded that the EPA reevaluate the landfill for inclusion on the NPL (Apgar 1997). They claimed that the landfill posed an environmental threat to the Great Swamp National Wildlife Refuge and nearby brooks polluted by landfill contaminants. The Great Swamp Watershed Association also indicated that the landfill posed a public health threat because water from the site flows into the Passaic River, a source of drinking water to central New Jersey residents.

In 1985, the site was evaluated by the United States Environmental Protection Agency for possible addition to the National Priorities List. At that time, it was determined that results of surface water, soil, and sediment sampling did not warrant any further action or the addition of the site to the National Priorities List. Subsequently, a local environmental group (Great Swamp Watershed Association) voiced concern that inadequate data had been used to initially characterize the site and that the site posed a significant health threat to humans and wildlife. To address these concerns, the United States Environmental Protection performed additional environmental sampling in May 1999. Results indicated elevated levels of phthalates, metals, and polychlorinated biphenyls in site soils; mercury and polychlorinated biphenyls were also detected in surface water and sediment samples obtained from a portion of the site overlapping the refuge. Based on these results, the Rolling Knolls Landfill site was proposed to be added to the National Priorities List on April 30, 2003; the site was listed to the National Priorities List on September 29, 2003.

The property was once known as Miele's Dump after former owner (possibly the original owner) Robert Miele who operated a municipal waste disposal company which legally dumped municipal and household refuse at the site. The current owner is the Estate of Robert Miele. The EPA identified three potentially responsible parties (PRPs) in 2005 - Lucent, Novartis and Chevron - that signed an agreement to conduct investigations. The search for additional responsible parties continues, according to the EPA. The township was not listed as a responsible party even though they used the site for municipal waste in the 1960s.

References:

<http://ecos.fws.gov/cap/summaryReport.do?studyId=1740>
http://www.chathamtownship.org/rolling_knolls.html
<http://www.epa.gov/superfund/sites/npl/nar1681.htm>
<http://cfpub.epa.gov/supercpad/cursites/csitinfo.cfm?id=0200542#CleanupProgr>
<http://www.atsdr.cdc.gov/HAC/pha/Rolling%20Knolls%20Landfill/RollingKnollsLandfillPHA070506.pdf>
<http://www.atsdr.cdc.gov/HAC/pha/Rolling%20Knolls%20Landfill/figs2-4.pdf>
<http://www.atsdr.cdc.gov/HAC/pha/Rolling%20Knolls%20Landfill/figs5-6.pdf>
<http://www.atsdr.cdc.gov/HAC/pha/Rolling%20Knolls%20Landfill/figs7-9.pdf>
Report by Apgar Associates, 1997 (attached).

OPEN SPACE

Open space in the Delta section includes the Great Swamp National Wildlife Refuge which occupies the central region, The Rolling Knolls landfill, Morris County parkland in the northwest, recreational land owned by Chatham Township in the northeast near Southern Boulevard, a parcel owned by a fire company on Britten Road, and several private parcels in the northwest. A separate parcel owned by Chatham Township on Southern Boulevard is adjacent to Refuge land.